

**Comparison of Current DEC Air Quality
Programs and Potential Federal Programs**

Acronyms Used

AQRV	Air Quality Related Value
BACT	Best Available Control Technology
CAA	Clean Air Act
DEC	Department of Environmental Conservation
EPA	Environmental Protection Agency
HAP	Hazardous Air Pollutant -- referred to in Alaska's program as hazardous air contaminant
IEU	Insignificant Emission Unit
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
ORL	Owner Requested Limit of 18 AAC 50.225 to avoid a permit classification
PAL	Pre-Approved Limit of 18 AAC 50.230 to avoid a permit classification
PM-10	Particulate matter with a diameter of 10 microns or less
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
tpy	tons per year
VOC	Volatile Organic Compound

EPA

DEC

Title V

Permit Avoidance	Part 71 program (40 C.F.R. 71) does not have a mechanism for enforceable limits to avoid major source classification	18 AAC 50.225 and 230 provide for Owner Requested Limits and Preapproved Limits to avoid classification as a major source for facilities with potential emissions greater than 100 tpy, but actual emissions less.
Fees	\$36.03 per ton of regulated air pollutant	\$5.07 per ton
	No permit administration fees	Permit administration fees \$78 per hour
	Penalties -- After 30 days past the due date, a penalty of 50% of the fee or past due amount.	No comparable penalty
	Interest on unpaid fees -- federal short term rate plus 3 percentage points	Interest 2 percentage points higher than the prime rate
	Emissions exceeding 4000 tpy per pollutant exempted	Emissions exceeding 4000 tpy per pollutant exempted for reduced sulfur compounds and ammonia only
	N/A	Facility with an ORL or PAL does not pay emission fees
	No 10 tpy minimum assessable amount Categorical Insignificant Emissions Units exempted	No fee for facility wide emissions less than 10 tpy per pollutant No specific exemption for IEUs
Applicability	No minor source operating permits. However, the pre-1997 permits to operate are still part of the approved SIP.	Operating permits apply to major facilities and ambient air quality facilities (minor).

EPA Objection and Public Petitions	45 day EPA review not necessary since they would issue the permits	45 day EPA review and opportunity to veto permit provisions.
	Permits become effective 30 days after notice of the final permit decision. 30 day opportunity for petition to Environmental Appeals Board to change permit conditions.	60 day opportunity for public petition to EPA Administrator to object to permit conditions after EPA review
Schedule	For permits not yet issued -- 6 months to one year to submit new applications for facilities not yet having a part 70 permit. The 3 year clock for permit issuance apparently starts over.	
Permit Duration	5 years, except for municipal waste combustors regulated under CAA Section 129 (12 years with review every 5 years)	5 years
IEUs	Categorical IEUs -- mobile sources and 7 other categories	105 categorical IEU types
	Regulated air pollutants excluding HAPs -- individual emission unit <u>potential to emit</u> less than 2 tpy	Actual emissions -- 5 tpy CO, 2 tpy NO _x , SO ₂ , VOC, 0.75 tpy PM-10
	HAPs -- individual emission unit <u>potential to emit</u> less than 1000 pounds	Actual emissions -- Other pollutants listed in lesser amounts

SIP

General Federal Requirements	<p>CAA Section 110 requires a plan which requires implementation, maintenance, and enforcement of ambient air quality standards. The plan must include enforceable emission limitations and other control measures, means, or techniques as may be necessary.</p> <p>40 C.F.R. 51.166(a) requires the plan to include emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality. Plan revisions which allow increases in emissions above the baseline concentration must include a demonstration that emission increases must not violate PSD increments.</p>	<p>To satisfy these requirements:</p> <ul style="list-style-type: none"> - emission limitations and prohibitions - new source review program for major and minor sources - oil and gas permit by rule - benchmarking process for efficiency - ambient analysis mandatory for some facilities; department discretion for others.
Permit Programs	EPA approved SIP permit program is the pre-1997 permit to operate for both major and minor sources	DEC is implementing the separate construction permit and operating permit programs for both major and minor sources
Ambient Analysis	Large number of decisions by permitting authority based on site specific circumstances	
General Opacity Standard	20% limit as a 3 minute aggregate standard [not to exceed 20% for more than 3 minutes per hour]	20% as a 6 minute average. The 3 minute aggregate standard will continue to apply until EPA approves the new form of the standard. DEC will request EPA change the approved SIP to the new 6 minute average.

PSD

Resources	EPA Region 10 currently has one permit writer. Do not have authority to charge permit fees. EPA could contract out permit writing if funding became available. There would be potential for enforcement for operation without a permit.	Currently 6 construction permit positions. Two additional positions to be hired for oil and gas budget increment. Additional staff sometimes assigned temporarily to construction permitting. Permit administration fees -- \$78 per hour
Issuance Schedule	Clean Air Act section 165 allows EPA one year to make a final decision after a complete application is filed.	Under Alaska statutes and regulations, a construction permit must be issued within approximately six months of receiving the application, depending on the length of the public comment period, and assuming that the application will be found complete. See the tables below showing actual issuance times.
Permit or PSD Classification Avoidance	Part 52 program [40 C.F.R. 52.21] does not have mechanism for enforceable limits to become synthetic minor. It is unclear if EPA would implement the minor new source review program in the current approved SIP that could set PSD avoidance limits.	Limits to avoid construction permit through 18 AAC 50.225 and 230 provide for Owner Requested Limits and Preapproved Limits. Limits in a construction permit through 18 AAC 50.305 to avoid classification as a PSD major source or major modification.
BACT Determinations	State criteria for economic feasibility and which sources to include for emission reductions may vary from EPA's. Example is the Cominco permit.	
Ambient Analysis	Large number of decisions for the permitting authority based on site specific circumstances	
Definition of <i>begin actual construction</i>	EPA defines this in terms of specific permanent physical changes	DEC regulations do not define the beginning of construction, so there has been more interpretation involved in deciding what activities can be done before the permit is issued.
Emission Increases and Decreases	For PSD to apply, a modification must exceed a PSD modification threshold. The modification plus contemporaneous increases and decreases must also exceed the modification threshold. The contemporaneous period is 5 years.	Continuous emissions bank account from program beginning or initial construction. Modification that causes bank account to exceed PSD modification threshold goes through PSD.
Modification -- exemptions	Routinely repair and replacement Alternative fuels or raw materials Temporary clean coal demonstration project Permanent clean coal project that does not increase potential to emit Non-profit health or educational institution (with governor request)	DEC regulations are silent on these exemptions

Air Quality Related Values (AQRVs)	Permit cannot be issued if adverse impacts from the facility or modification to AQRVs in a Class I area only. For other areas the application must analyze the impacts on soils, visibility, and vegetation.	The permit cannot be issued if there is an adverse impact from the facility or modification or associated growth to AQRVs in any area in the state.
Variances	EPA regulations include provisions for variances from the Class I increments	DEC regulations do not contain Class I increment variance provisions
Class I Area	EPA and DEC interpretations of the Denali Class I area boundary may differ. This is a decision that belongs with the park service, since it comes from their federal statute. In absence of a determination by the park service, DEC adopted a regulation using only the original park boundaries for the Class I area.	

Time Taken for DEC to Issue PSD Permits 1998 - 2001	
Number of PSD permits	Time from revised application to final decision
11	< 6 mo
3	6 mo - 1 yr
1	> 1 yr
Number of PSD permits	Time from initial application to final decision
1	< 6 mo
6	6 mo - 1 yr
2	1 yr - 2 yr
5	> 2 yr

NESHAPs

The NESHAPs program is currently delegated.	EPA has identified what portions it has delegated to DEC, and what it has retained when it delegated the program as a whole. Where EPA does not delegate authority, they retain the sole responsibility for making interpretations	DEC is obligated to include all applicable requirements in Title V permits. Where EPA does delegate authority, DEC will follow clear decisions EPA has made. If EPA has not made a clear decision, DEC has the responsibility to make its own interpretations.
	Automatically granted through the Part 70 program:	
	Approval and disapproval of construction and reconstruction	40 C.F.R. 63.5(e) and (f)
	Extension of compliance with emission standards	40 C.F.R. 63.5(i)(1)
	Delegated	
	Applicability determinations	40 C.F.R. 63.1

	<p>Operation and maintenance requirements--responsibility for determining compliance 40 C.F.R. 63.6(e)</p> <p>Compliance with non-opacity standards --responsibility for determining compliance 40 C.F.R. 63.6(f)</p> <p>Compliance with opacity and visible emissions standards--responsibility for determining compliance 40 C.F.R. 63.6(h) except (h)(9)</p> <p>Approval of site-specific test plans 40 C.F.R. 63.7(c)(2)(i) and (d)</p> <p>Approval of minor alternatives to test methods 40 C.F.R. 63.7(e)(2)(i)</p> <p>Approval of shorter sampling times and volumes when necessitated by process variables or other factors 40 C.F.R. 63.7(e)(2)(ii) and (f)</p> <p>Waiver of performance testing 40 C.F.R. 63.7(e)(2)(iv) and (h)(2), (3)</p> <p>Approval of site-specific performance evaluation (monitoring) test plans 40 C.F.R. 63.8(c)(1) and (e)(1)</p> <p>Approval of minor or intermediate alternatives to monitoring 40 C.F.R. 63.8(f)</p> <p>Approval of adjustments of time periods for submitting reports 40 C.F.R. 63.9 and 63.10 except 63.10(f)</p>
	Not Delegated
	<p>Approval of non opacity emission standards 63.6(g)</p> <p>Approval of alternative opacity standard 63.6(h)(9)</p> <p>Approval of major alternatives to test methods 63.7(e)(2)(ii) and (f)</p> <p>Approval of major alternatives to monitoring 63.8(f)</p> <p>Waiver of recordkeeping 63.10(f)</p>
Sources :	Federal Register Vol. 64, No. 87. May 6, 1999, p. 24288. Memo from John Seitz to EPA Regions, including Director, Office of Air Quality, Region X, July 10, 1998.

NSPS

The NSPS program is currently not delegated except for 4 source types.	Responsible for interpretations for all NSPS related questions. Retains direct enforcement authority for all NSPSs.	The department is obligated by AS 46.14.120 to include all applicable requirements in operating permits, regardless of whether EPA has delegated the program. DEC administers and enforces NSPS standards through the operating permit program.
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DEC has applied for and expects to received delegation. We expect what is and is not delegated to be similar to the NESHAP program.

Part 61 NESHAPs

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	Delegated	
	General Provisions, except for those specifically identified below	Subpart A
	Mercury	Subpart E
	Equipment leaks of Benzene	Subpart J
	Asbestos, sections 61.145 and 61.154 along with other sections and appendices identified in section 61.145, only as they apply to facilities needing an operating permit.	Subpart M
	Equipment leaks	Subpart V
	Benzene from Benzene Storage Vessels	Subpart Y
	Benzene Waste Operations	Subpart FF
	Not Delegated	
Approval of major alternatives to test methods	61.04(b), 61.12(d)(1), 61.13(h)(1)(ii)	
Approval of major alternatives to monitoring	61.14(g)(1)(ii)	
	61.16	
	61.53(c)(4)	
Any sections in the subparts pertaining to approval of alternative standards or major alternatives to test methods or monitoring		
All authorities identified in the subparts that cannot be delegated		
Source: Federal Register Vol. 64, No. 87. May 6, 1999, p. 24288.		